#### PATENT COOPERATION TREATY

| From the   |                                       | • .                         |   |  |  |  |
|--|---------------------------------------|-----------------------------|---|--|--|--|
| INTERNATIONAL SEARCHING AUTHORITY  | •                                     | DCT                         | 食類好                                     |  |  |  |
| To:<br>OKABE MASAO   |                                       | PCT                         | 74.5                                    |  |  |  |
|  | uл                                    | ITTEN OPINION OF T          | THE MAN                                 |  |  |  |
| No.602, Fuji Bldg., 2-3,   |                                       | ONAL SEARCHING A            |   |  |  |  |
| Marunouchi 3-chome,  |                                       | (PCT Rule 43bis.1)          |   |  |  |  |
| Chiyoda-ku, Tokyo<br>100-0005 JAPAN  |                                       | (1 C1 Rule 45015.1)         | -                                       |  |  |  |
|  |                                       |                             | · · · · · · · · · · · · · · · · · · ·   |  |  |  |
| * * * * * * * * * * * * * * * * * * *  | Date of mailing (day/month/year)      | 25. 5. 200                  | )4                                      |  |  |  |
| Applicant's or agent's file reference  | FOR FURTHER ACTION                    |                             |   |  |  |  |
| CF017899WO   | See paragraph 2 below                 |                             |   |  |  |  |
| International application No.  International filing date   | · · · · · · · · · · · · · · · · · · · | Priority date (day/month/)  | •                                       |  |  |  |
| PCT/JP2004/001423 10.02  |                                       | 14.02.                      | 2003                                    |  |  |  |
| International Patent Classification (IPC) or both national classificat |                                       |                             |   |  |  |  |
| Applicant  |                                       |                             | -                                       |  |  |  |
| CANON KABUSHIK   | I KAISHA                              |                             |   |  |  |  |
| 1. This opinion contains indications relating to the following ite   | ms:                                   |                             |   |  |  |  |
| Box No. I Basis of the opinion   |                                       |                             |   |  |  |  |
| Box No. II Priority  |                                       |                             |   |  |  |  |
| Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability   |                                       |                             |   |  |  |  |
| Box No. IV Lack of unity of invention  |                                       |                             |   |  |  |  |
| Box No. V Reasoned statement under Rule 43bis. 1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement  |                                       |                             |   |  |  |  |
| Box No. VI Certain documents cited   |                                       |                             |   |  |  |  |
| Box No. VII Certain defects in the international application   |                                       |                             |   |  |  |  |
| Box No. VIII Certain observations on the international application   |                                       |                             |   |  |  |  |
|  |                                       | ·. ·                        |   |  |  |  |
| 2. FURTHER ACTION  |                                       |                             |   |  |  |  |
| If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1 bis(b) that written opinions of this International Searching Authority will not be so considered.   |                                       |                             |   |  |  |  |
| If this opinion is, as provided above, considered to be a written a written reply together, where appropriate, with amendments, PCT/ISA/220 or before the expiration of 22 months from the properties.   | before the expiration of              | f 3 months from the date of | ubmit to the IPEA<br>of mailing of Form |  |  |  |
| For further options, see Form PCT/ISA/220.   | •.                                    |                             |   |  |  |  |
| 3. For further details, see notes to Form PCT/ISA/220.   |                                       |                             |   |  |  |  |
|  |                                       |                             |   |  |  |  |
| Name and mailing address of the ISA/JP   | Authorized officer                    |                             | 4L 8122                                 |  |  |  |
| Japan Patent Office  |                                       |                             |   |  |  |  |
| 3-4-3, Kasumigaseki, Chiyoda-ku, Tokyo 100-8915, Japan   | Telephone No. +81                     | 3-3581-1101 Ext. 3          | 1498                                    |  |  |  |

# WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/JP2004/001423

| Box  | No. I   | Basis of the opinion   |   |
|------|---------|--|---|
| 1.   | With r  | egard to the language, this opinion has been established on the ba   | sis of the international application in the language in   |
| · -• | which   | it was filed, unless otherwise indicated under this item.  |   |
| •    |         | This opinion has been established on the basis of a translation from , which is the language of a translation furni                        | m the original language into the following language ished for the purposes of international search (under       |
|      |         | Rules 12.3 and 23.1(b)).   |   |
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|      |         |  |   |
| 2.   | With a  | regard to any nucleotide and/or amino acid sequence disclosed d invention, this opinion has been established on the basis of:              | in the international application and necessary to the   |
|      | a. type | e of material  | •   |
|      | Ė       | a sequence listing   |   |
|      |         | table(s) related to the sequence listing   |   |
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|      | .C      | in written format  | •   |
|      |         | in computer readable form  |   |
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|      | :       | of filing/furnishing   |   |
|      | c. tim  | e of filing/furnishing contained in the international application as filed.  | •   |
|      | F       | filed together with the international application in computer i  | readable form.  |
|      | F       | furnished subsequently to this Authority for the purposes of s   |   |
|      |         |  |   |
| -3., |         | In addition, in the case that more than one version or copy of a si<br>filed or furnished, the required statements that the information in | equence listing and/or table relating thereto has been the subsequent or additional copies is identical to that |
|      | -       | in the application as filed or does not go beyond the application a  | s filed, as appropriate, were furnished.  |
|      |         |  |   |
| 4.   | Addi    | tional comments:   | ·   |
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## WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/JP2004/ 001423

| . Statement                   |          |                |     |
|-------------------------------|----------|----------------|-----|
| Novelty (N)                   | Claims   | 2-6,8-12,14-18 | YES |
|                               | Claims   | 1,7,13,19,20   | NO  |
| Inventive step (IS)           | Claims   |                | YES |
|                               | Claims   | 1-20           | NO  |
| Industrial applicability (IA) | Claims · | 1-20           | YES |
|                               | Claims   |                | NO  |

2. Citations and explanations

D1:JP 2002-26300 A(SHARP CORPORATION)2002.01.25,

D2:JP 2000-12866 A(TOSHIBA CORPORATION)2000.01.14,

D3:JP 63-172470 A(FUJITSU LIMITED)1988.07.16

### **Novelty**

The subject matters of claims 1,7,13,19,20 do not appear to be novel with respect to D1. D1 discloses a photoelectric converter, comprising a plurality of pixels each comprising a sensor element for converting incident light into an electrical signal and a thin film transistor connected to the sensor element.

And D1( [0057] paragraph) teaches that it is possible to form a staggered thin film transistor (a top gate type structure TFT).

### Inventive step

The subject matters of claims 2-6,8-12,14-16 do not appear to involve an inventive step in view of D1 and D2.

D2 discloses a photoelectric converter, comprising a double gate type structure TFT (a p lurality of thin film transistors which are connected in series with one another and which use a same gate wiring).

And D2(figs.9-11) discloses a photoelectric converter, comprising a resetting thin film transistor and an amplifying thin film transistor.

The skilled person in the art would easily conceive the idea of employing the feature in D2 to substitute the feature disclosed in D1.

The subject matters of claims 17,18 do not appear to involve an inventive step in view of D1.D2 and D3.

D3 discloses an insulating layer formed between the insulating substrate and the thin fil m transistors.

The skilled person in the art would easily conceive the idea of employing the feature in D3 to substitute the feature disclosed in D1 and D2.